IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

1. (currently amended) A process for the preparation of a conducting electrode, which is useful for the electrocatalytic oxidation of alcohols, which comprises coating a substrate with a metallic or conducting backing layer to obtain a metallic or conducting backing layer coated substrate, and electrochemically coating the metallic ~~metal coated~~ or conductive backing layer coated substrate with a conducting polymer using a monomer or a mixture of monomer and an activating agent to obtain the conducting electrode.

2. (original) A process as claimed in claim 1 wherein the substrate comprises an insulating polymer coated substrate.

3. (original) A process as claimed in claim 1 wherein the substrate is selected from the group consisting of a glass plate, polyester film having smooth surface and an electrical resistivity of greater than 10^{10} ohm-cm.

4. (currently amended) A process as claimed in claim 1 wherein the metallic backing layer comprises [[of]] a vacuum deposited thin film of a metal selected from the group consisting of gold, platinum and chromium.

5. (original) A process as claimed in claim 1 wherein the conducting backing layer is selected from dip-coated carbon and graphite dispersions having inert nature in the potential range of 0 to 1.0 Volts with respect to saturated calomel electrode (SCE).

6. (original) A process as claimed in claim 2 wherein the insulating polymer is selected from the group consisting of polyvinyl butyral, polyvinyl acetate and styrene butadiene co-polymer, having adhesion strength higher than 10 g/micron.

7. (currently amended) A process as claimed in claim 6 wherein the insulating polymer ~~solution~~ is a solution used in a concentration in the range of 1 to 2 wt./v.

8. (original) A process as claimed in claim 1 wherein the activating agent is selected from the group consisting of halides of multivalent metals with electronegativity in the range of 1.2 to 1.5.

9. (currently amended) A process as claimed in claim 1 wherein the conducting polymer coated substrate ~~is substrate~~ is subjected to doping with a doping agent when ~~the polymer deposition is carried out~~ only [[with]] the monomer is used.

10. (currently amended) A process as claimed in claim 9 wherein the doping agent contains electron acceptor compounds ~~such as copper chloride, ferric chloride, cobalt chloride and like Lewis acid compounds~~ and is used in a concentration in the range of 0.001 M to 0.1 M ~~preferably 0.006 M to 0.012 M~~.

11. (currently amended) A process as claimed in claim 1 wherein the monomer ~~used for depositing conducting polymer film~~ is selected from the group consisting of aromatic and heterocyclic compounds containing nitrogen.

12. (currently amended) A process as claimed in claim 1 wherein the monomer is selected from the group consisting of aniline, pyrrole, ~~anisidene~~ anisidine and toluediene.

13. (currently amended) A process as claimed in claim 1 wherein the coating of the conducting polymer on the metallic or conducting backing layer of the ~~metal pre-coated insulating~~ substrate is carried out by dipping the metallic or conducting backing layer of the ~~pre-treated insulating~~ substrate in an aqueous electrolyte containing 0.1 to 0.5 M hydrogen containing mineral acids ~~such as hydrochloric or sulfuric acid~~ together with the [[a]] monomer and a macrocyclic compound, by applying potential of 0.7 to 0.9 Volts.

14. (new) A process as claimed in claim 10 wherein the electron acceptor compound is selected from the group consisting of copper chloride, ferric chloride, cobalt chloride and Lewis acid compounds.

15. (new) A process as claimed in claim 10 wherein the concentration used is in the range of 0.006 M to 0.012 M.

16. (new) A process as claimed in claim 13 wherein the hydrogen containing mineral acid is hydrochloric or sulfuric acid.

17. (new) A process for the preparation of a conducting electrode, which is useful for the electrocatalytic oxidation of alcohols, the process comprising coating an insulating polymer coated substrate with a metallic or conducting backing layer to obtain a metallic or conducting backing layer coated substrate, and electrochemically coating the metallic or conducting backing layer coated substrate with a conducting polymer using a monomer or a mixture of monomer and an activating agent to obtain the conducting electrode.

18. (new) A process as claimed in claim 17 wherein the insulating polymer is selected from the group consisting of polyvinyl butyral, polyvinyl acetate and styrene butadiene co-polymer, having adhesion strength higher than 10 g/micron.

19. (new) A process as claimed in claim 17 wherein the conducting polymer coated substrate is doped with a doping agent when only the monomer is used.

20. (new) A process as claimed in claim 17 wherein the metallic or conducting backing layer of the substrate is dipped in an aqueous electrolyte containing 0.1 to 0.5 M hydrogen containing mineral acids together with the monomer and a macrocyclic compound and applying a potential of 0.7 to 0.9 Volts.